Attorney Docket No. P06553
Customer Number 27045

REMARKS/ARGUMENTS

1.) Claim Status

Claim 5 is pending in the application. Favorable reconsideration of the application is respectfully requested in view of the foregoing amendments and the following remarks.

2.) Claim Rejections – 35 U.S.C. § 103(a)

The Examiner rejected claim 5 under 35 U.S.C. § 103(a) as being unpatentable over Billstrom (US 5,590,133) and further in view of Jones (US 5,412,730). The Applicant has amended the claims to better distinguish the claimed invention from Billstrom and Jones. The Examiner's consideration of the amended claims is respectfully requested.

The Examiner notes that Billstrom discloses a TDMA mobile radio system and recognizes the need for encryption/decryption (Col. 8, lines 17-21), but is silent on the form of this security or how to accomplish it. The Examiner relies on Jones for this aspect. Jones, however, does not disclose or suggest an encryption method compatible with a TDMA mobile radio system, as claimed by the Applicant.

Jones states that the disclosed method is suitable for transmitting encrypted data over a voice-grade telephone line. (Abstract, lines 1-2). The Examiner points to FIGS. 1 and 4 of Jones and states that the data blocks being counted by the block counter 21 are analogous to the frames in Billstrom. Thus, the Examiner contends that claimed step a), "forming a pseudo-random sequence from an encryption key and an ordinal number of the frame in which the information is transmitted in accordance with an encryption algorithm," is suggested.

The Applicant disagrees because Jones states, "Advantageously, the block counter 21 may simply count the number of bytes (characters), words or blocks of data being transmitted, compare the current count with a predetermined 37 interval number" [sic] and produce an advance signal each time the current count reaches the interval number (at which time the current count is reset to 0)." (Col. 3, lines 19-25). Thus, the output of the block counter is an advance signal, not an ordinal number of a frame. Therefore,

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the pseudo-random sequence cannot be formed from an encryption key and an ordinal number of the frame in which the information is transmitted. Therefore, this limitation of the claim is not taught or suggested by Jones.

Applicant's step b) recites, "forming a modified pseudo-random sequence from said pseudo-random sequence, in dependence on the ordinal number of the time slot within which the information block that is encrypted with the modified pseudo-random sequence shall be transmitted, in accordance with a first algorithm." Applicant emphasizes that the ordinal number of the *time slot* is utilized in this step to form the modified pseudo-random sequence while the ordinal number of the *frame* was used in step a) to form the pseudo-random sequence. The Examiner has not pointed to anything in Jones that allegedly corresponds to the ordinal number of the time slot, and its use in forming the modified pseudo-random sequence. The Examiner merely states, "Forming a modified pseudo-random sequence from the pseudo-random sequence above depend on the ordinal number of the time slot within which information block is encrypted see figure 4 38 and 21 23." However, Jones discloses only one block counter, and if it corresponds to a frame counter (as contended by the Examiner), it cannot also correspond to a time slot counter. Therefore, this limitation of the claim is not taught or suggested by Jones.

Applicant's step c) recites, "performing an Exclusive OR (EXOR) operation between said modified pseudo-random sequence and each block of non-encrypted information, wherein generation of the modified pseudo-random sequence for each slot is independent of the non-encrypted information so that there is no error propagation when deciphering a slot with a bit error." The Examiner has not pointed to anything in Jones that discloses or suggests this step. The Examiner states, "From Figure 1 we can see that the modified pseudo random sequence is combined in the encryptor and original data source (non-encrypted information) where the encryptor performs such logic operations as XOR on the two." However, Jones does not state that an XOR operation is performed. Jones states, "The encryptor 17 translates fixed length segments of the data from source 15 ("clear text") into fixed-length "cipher text" output segments, each segment translation taking place in a manner uniquely determined by the encryption key currently supplied by the pseudo-random number generator 23."

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(Col. 3, lines 41-46). FIG. 1 suggests that everything is encrypted because the only connection between the transmitting station and the receiving station comes out of the encryptor. FIG. 4 does not suggest anything because *nothing* comes out of the encryptor (as shown, it only has inputs). Therefore, this limitation of the claim is not taught or suggested by Jones.

To establish a prima facie case of obviousness, the cited references must disclose or suggest all of the claim amendments. Billstrom and Jones do not. Therefore, the withdrawal of the rejection and the allowance of claim 5 are respectfully requested.

CONCLUSION

In view of the foregoing remarks, the Applicant believes all of the claims currently pending in the Application to be in a condition for allowance. The Applicant, therefore, respectfully requests that the Examiner withdraw all rejections and issue a Notice of Allowance for claim 5.

The Applicant requests a telephonic interview if the Examiner has any questions or requires any additional information that would further or expedite the prosecution of the Application.

Respectfully submitted,

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